SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: M 380 RESIN

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture Epoxy resin

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
AXSON FRANCE
15 Rue de l'Equerre - F-95310 SAINT OUEN L'AUMONE
Tél.+33 (0)1 34 40 34 60

Further information obtainable from: DPT HSE -(33) 01 34 40 34 60 - safety@axson.fr

1.4 Emergency telephone number: ORFILA : +33 (0)1 45 42 59 59

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/38: Irritating to eyes and skin.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07 GHS09

Signal word Warning

Hazard-determining components of labelling:
reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight \( \leq 700 \))

bisphenol-F-epichlorhydrine ; epoxy resins (molecular weight \( \leq 700 \))

1,6-Hexanediol diglycidyl ether

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.
Trade name: M 380 RESIN

H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:
EUH205 Contains epoxy constituents. May produce an allergic reaction.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 25068-38-6</th>
<th>reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight ( \leq 700 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP: 500-033-5</td>
<td>Xi R36/38; Xi R43; N R51/53</td>
</tr>
<tr>
<td>Reg.nr.: 01-2119456619-26</td>
<td>25-50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 28064-14-4</th>
<th>bisphenol-F-epichlorhydrin; epoxy resins (molecular weight ( \leq 700 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP: 500-006-8</td>
<td>Xi R36/38; Xi R43; N R51/53</td>
</tr>
<tr>
<td>Reg.nr.: 01-2119454392-40</td>
<td>10-25%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 16096-31-4</th>
<th>1,6-Hexanedioldiglycidyl ether</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 240-260-4</td>
<td>Xi R36/38; Xi R43</td>
</tr>
<tr>
<td>Reg.nr.: 01-2119463471-41</td>
<td>R52/53</td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412</td>
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<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation:
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:
Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
Hydrogen chloride (HCl)

5.3 Advice for firefighters

Protective equipment:
Wear fully protective suit.
Wear self-contained respiratory protective device.

Additional information
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions:
Store in cool, dry conditions in well sealed receptacles.

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands:

Protective gloves

Material of gloves

Synthetic rubber gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety glasses

Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Pasty

Colour: Grey

Odour: Weak, characteristic

Change in condition

Melting point/Melting range: NA °C

Boiling point/Boiling range: >200 °C (DIN 53171)

Flash point: >110 °C (ISO 2719)

Ignition temperature: >300 °C (DIN 51 794)

Decomposition temperature: >200 °C (DIN 53171)
Trade name: M 380 RESIN

- Self-igniting: Product is not self-igniting.
- Danger of explosion: Product does not present an explosion hazard.
- Density at 25 °C: 0.8 g/cm³ (ISO 1675:1985)
- Solubility in / Miscibility with water: Insoluble.
- organic solvents: Soluble in many organic solvents.
- 9.2 Other information No further relevant information available.

**SECTION 10: Stability and reactivity**

- 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions May produce violent reactions with bases and numerous organic substances including alcohols and amines. Exothermic polymerisation.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Irritant gases/vapours

**SECTION 11: Toxicological information**

- 11.1 Information on toxicological effects
- Acute toxicity
- LD/LC50 values relevant for classification:

  **25068-38-6 reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>11400 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;2000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

  **28064-14-4 bisphenol-F-epichlorhydrine; epoxy resins (molecular weight < 700)**

<table>
<thead>
<tr>
<th>Route</th>
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<tr>
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</tr>
<tr>
<td>Dermal</td>
<td>&gt;2000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation May cause an allergic skin reaction.
- Sensitisation May cause sensitisation by skin contact.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
TRADE NAME: M 380 RESIN

CONTINUED FROM PAGE 5:

- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**

  - **Aquatic toxicity:**

    | Reaction Product | aquatic toxicity | 
    |------------------|------------------|
    | 25068-38-6       |                 |
    | bisphenol A (epichlorhydrin); epoxy resin (number average molecular weight \( \leq 700 \)) |
    | LC50 (48h)       | 2.1 mg/l (daphnia) |
    | LC50 (72h)       | >11 mg/l (alga)    |
    | LC50 (96h)       | 1.3 mg/l (fish)    |

- **12.2 Persistence and degradability** No further relevant information available.

- **Other information**: The product is difficultly biodegradable.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

  - **Remark**: Toxic for fish

- **12.5 Results of PBT and vPvB assessment**

  - **PBT**: Not applicable.
  - **vPvB**: Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**

  - **Recommendation**

    Must not be disposed together with household garbage. Do not allow product to reach sewage system.

    Dispose of the product by burning in a suitable incinerator or bury in an approved landfield following all applicable local and/or national regulations.

- **European waste catalogue**

  - **200127** paint, inks, adhesives and resins containing dangerous substances

- **Uncleaned packaging**

  - **Recommendation**

    Empty containers may not be disposed of unless any remaining material adhering to the internal walls has been removed.

    Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- **14.1 UN-Number**

  - **ADR, IMDG, IATA**: UN3077

- **14.2 UN proper shipping name**

  - **ADR**: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (epoxy resins, epoxy resins)
Trade name: M 380 RESIN

- IMDG
  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (epoxy resins, epoxy resins), MARINE POLLUTANT

- IATA
  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (epoxy resins, epoxy resins)

- 14.3 Transport hazard class(es)
  - ADR, IMDG, IATA

- Class
  9 Miscellaneous dangerous substances and articles.

- Label
- 14.4 Packing group
  - ADR, IMDG, IATA
  III

- 14.5 Environmental hazards:
  Product contains environmentally hazardous substances: epoxy resins
  Yes
  Symbol (fish and tree)
  Symbol (fish and tree)

- Marine pollutant:
- Special marking (ADR):
- Special marking (IATA):

- 14.6 Special precautions for user
  Warning: Miscellaneous dangerous substances and articles.
  90
  EMS Number: F-A,S-F

- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  Not applicable.

- Transport/Additional information:
  - ADR
    - Limited quantities (LQ) 5 kg
    - Transport category 3
    - Tunnel restriction code E
    - UN "Model Regulation": UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (epoxy resins, epoxy resins), 9, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - National regulations:
    - Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.